

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 12/05/2003

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/833,418	04/12/2001	Sarah D. Redpath	RSW920000176US1	1623
7590 12/05/2003			EXAMINER	
Gerald R. Woods			A DIVAL,IMMA	
IBM Corporation T81/503 PO Box 12195		ART UNIT	PAPER NUMBER	
Research Triangle Park, NC 27709			2672	_

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/833,418	REDPATH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Javid A Amini	2672				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	136(a). In no event, however, may a reply be tir bly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1)⊠ Responsive to communication(s) filed on <u>07 N</u>	November 2003.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 						
Priority under 35 U.S.C. §§ 119 and 120						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. 						
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) atent Application (PTO-152)				

Art Unit: 2672

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Cole, and further in view of Weinberg et al. (hereinafter referred as "Weinberg").

1. Claim 1.

"A method of displaying layered data, said method comprising: selecting one or more objects to be displayed in a plurality of layers; identifying a plurality of display attributes, wherein one or more of the display attributes corresponds to each of the layers; matching each of the objects to one of the layers; applying the display attributes corresponding to the layer for each of the matched objected; and displaying the objects with the applied display attributes",

Cole in abstract and also in Fig. 2 discloses a method of displaying layered data. (Cole uses a term "level", and claim language uses a term "layer"). Cole in Fig. 2 illustrates a plurality of display attributes and one or more attributes correspond to each of the levels. Cole in col. 2, lines 12-19 discloses that the navigable structure see fig. 1 may be organized using one or more

Art Unit: 2672

themes (display attributes). For example, in the case of interactive television systems, it would be appropriate to devote each level to a different genre of programming, such as comedy movies, action movies, and so on (Examiner's interpretation: Cole is matching each of the objects to one of the levels). As another example, an interactive learning system might devote upper levels to space and sky and lower levels to earth and sea. Cole in cols. 3 and 4, lines 65-67; lines 1-6, discloses (Examiner interpretation: the shape of an object can be considered as an attribute) different shapes are available for displaying an object. A regular person can apply the display attributes to each level, meaning one level can be shown as cylinders shape and the next level can be shown as cubes shape and etc. Cole at col. 9, line 22, discloses displaying the current visual object. But Cole does not explicitly specify display attributes corresponding to the layer for each of the matched objects. However, Weinberg at cols. 2 and 3, lines 58-67; 1-7, teaches the architecture that includes an API (application program interface) and includes API procedures ("methods") that allow other applications ("plug-ins") to, among other things, manipulate the display attributes of the nodes and links within a site map. Using these methods, a plug-in application can be added which dynamically superimposes data onto the site map by, for example, selectively modifying display colors of nodes and links, selectively hiding nodes and links, and/or attaching alphanumeric annotations to the nodes and links. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to incorporate the teaching of Weinberg into Cole since these two reference are directed to the process for graphically or visually representing information objects (GUI). Weinberg represents WEB sites and node structures graphically and Cole represents visual (graphically) navigation of information objects. Cole's invention would represent Applicant's claim invention

Art Unit: 2672

by integrating a part from Weinberg that is "dynamically superimposes data onto the site map" into Cole's. The result would thereby aid the user.

Page 4

2. Claim 2.

"The method as described in claim 1 further comprising: receiving a request from a user to rearrange the layers; rearranging the layers in response to the request, the rearranging including: re-matching one or more objects to a different layer from the plurality of layers; applying the display attributes corresponding to the different layer to the one or more re matched objects; and displaying the one or more re-matched objects". The limitations of claim 2 are similar to the limitations of claim 1, therefore see rejection of claim 1.

3. Claim 3.

"The method as described in claim 1 further comprising: reading the objects from a data store; and reading one or more object attributes corresponding to each object from the data store. wherein the matching further comprises: matching the object attributes corresponding to each object to one or more layer attributes corresponding to each layer". Cole in Fig. 1 illustrates disk and memory for storing data and also reading data object from storage environment.

4. Claim 4.

"The method as described in claim 1 further comprising: creating the objects; setting one or more object attributes corresponding to each object; and storing the object and the object attributes in a data store". Cole at col. 8, lines 62-67 teaches the limitations of claim 4. Also see Weinberg's fig. 9.

5. Claim 5.

Art Unit: 2672

"The method as described in claim 4 further comprising: establishing one or more relationships from at least one of the objects to one or more other objects". Cole at col. 1, lines 51-63 teaches the limitations of claim 5. Weinberg at col. 6, lines 38-54 teaches the limitations of claim 5.

Page 5

6. Claim 6.

"The method as described in claim 1 wherein the display attributes are selected from the group consisting of: color hue, color value, color saturation, size, three dimensional image, two dimensional image, animation, shading, fill pattern, line pattern, line weight, opaqueness, transparency, proximity, shape, and object anomaly", according to Markush groups, Cole in Figs. 3-9 illustrates the display attributes. Weinberg in Fig. 18 illustrates color coding.

7. Claim 7.

"The method as described in claim 1 further comprising: displaying one or more relationship lines connecting at least one of the objects to one or more other objects", see rejection of claim 1.

8. Claim 8.

"The method as described in claim 1 further comprising: determining a layer order for the plurality of layers, wherein the layer order determines a display emphasis corresponding to objects in the corresponding layers", Cole and Weinberg teach this limitation in fig. 2, and Figs. 1-6 respectively.

9. Claim 9.

"An information handling system comprising: one or more processors; a memory accessible by the processors; a nonvolatile storage area accessible by the processors; a display screen accessible by the processors; and a layered data display tool to display layered data on the display screen, the layered data display tool including: logic for selecting one or more objects to

Art Unit: 2672

be displayed in a plurality of layers; identification logic to identify a plurality of display attributes, wherein one or more of the display attributes corresponds to each of the layers; matching logic for matching each of the objects to one of the layers; applicator logic to apply the display attributes corresponding to the layer for each of the matched objected; and display control logic to display the objects with the applied display attributes", Cole in abstract and also in Fig. 2 discloses a method of displaying layered data. (Cole uses a term "level", and claim language uses a term "layer"). Cole in Fig. 2 illustrates a plurality of display attributes and one or more attributes correspond to each of the levels. Cole in col. 2, lines 12-19 discloses that the navigable structure see fig. 1 may be organized using one or more themes (display attributes). For example, in the case of interactive television systems, it would be appropriate to devote each level to a different genre of programming, such as comedy movies, action movies, and so on (Examiner's interpretation: Cole is matching each of the objects to one of the levels). As another example, an interactive learning system might devote upper levels to space and sky and lower levels to earth and sea. Cole in cols. 3 and 4, lines 65-67; lines 1-6, discloses (Examiner interpretation: the shape of an object can be considered as an attribute) different shapes are available for displaying an object. A regular person can apply the display attributes to each level, meaning one level can be shown as cylinders shape and the next level can be shown as cubes shape and etc. Cole at col. 9, line 22, discloses displaying the current visual object. But Cole does not explicitly specify display attributes corresponding to the layer for each of the matched objects. However, Weinberg at cols. 2 and 3, lines 58-67; 1-7, teaches the architecture that includes an API (application program interface) and includes API procedures ("methods") that allow other applications ("plug-ins") to, among other things, manipulate the display

Art Unit: 2672

attributes of the nodes and links within a site map. Using these methods, a plug-in application can be added which <u>dynamically superimposes</u> data onto the site map by, for example, selectively modifying display colors of nodes and links, selectively hiding nodes and links, and/or attaching alphanumeric annotations to the nodes and links.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Weinberg into Cole since these two reference are directed to the process for graphically or visually representing information objects (GUI). Weinberg represents WEB sites and node structures graphically and Cole represents visual (graphically) navigation of information objects. Cole's invention would represent Applicant's claim invention by integrating a part from Weinberg that is "dynamically superimposes data onto the site map" into Cole's. The result would thereby aid the user.

10. Claim 10.

"The information handling system as described in claim9 further comprising: a rearranging request received from a user; rearranging logic to rearrange the displayed layers, the rearranging logic including: re-matching logic to re-match one or more objects to a different layer from the plurality of layers; application logic to apply the display attributes corresponding to the different layer to the one or more re-matched objects; and display logic to display the one or more re matched objects". See rejection of claim 9.

11. Claim 11.

"The information handling system as described in claim 9 wherein the display attributes are selected from the group consisting of: color hue, color value, color saturation, size, three dimensional image, two dimensional image, animation, shading, fill pattern, line pattern, line

Art Unit: 2672

weight, opaqueness, transparency, proximity, shape, and object anomaly", according to Markush groups, Cole in Figs. 3-9 illustrates the display attributes. Weinberg in Fig. 18 illustrates color coding.

Page 8

Claim 12. 12.

"The information handling system as described in claim 9 further comprising: logic to read the objects from a data store within then on volatile storage area; and logic to read one or more object attributes corresponding to each object from the data store, wherein the matching logic further comprises: logic to match the object attributes corresponding to each object to one or more layer attributes corresponding to each layer", Cole in Fig. 1 illustrates disk and memory for storing data and also reading data object from storage environment.

13. Claim 13.

"A computer program product stored on a computer usable medium for displaying layered data." said computer program product comprising: means for selecting one or more objects to be displayed in a plurality of layers; means for identifying a plurality of display attributes, wherein one or more of the display attributes corresponds to each of the layers; means for matching each of the objects to one of the layers; means for applying the display attributes corresponding to the layer for each of the matched objected; and means for displaying the objects with the applied display attributes", Cole in abstract and also in Fig. 2 discloses a method of displaying layered data. (Cole uses a term "level", and claim language uses a term "layer"). Cole in Fig. 2 illustrates a plurality of display attributes and one or more attributes correspond to each of the levels. Cole in col. 2, lines 12-19 discloses that the navigable structure see fig. 1 may be organized using one or more themes (display attributes). For example, in the case of interactive

Art Unit: 2672

television systems, it would be appropriate to devote each level to a different genre of programming, such as comedy movies, action movies, and so on (Examiner's interpretation: Cole is matching each of the objects to one of the levels). As another example, an interactive learning system might devote upper levels to space and sky and lower levels to earth and sea. Cole in cols. 3 and 4, lines 65-67; lines 1-6, discloses (Examiner interpretation: the shape of an object can be considered as an attribute) different shapes are available for displaying an object. A regular person can apply the display attributes to each level, meaning one level can be shown as cylinders shape and the next level can be shown as cubes shape and etc. Cole at col. 9, line 22, discloses displaying the current visual object. But Cole does not explicitly specify display attributes corresponding to the layer for each of the matched objects. However, Weinberg at cols. 2 and 3, lines 58-67; 1-7, teaches the architecture that includes an API (application program interface) and includes API procedures ("methods") that allow other applications ("plug-ins") to, among other things, manipulate the display attributes of the nodes and links within a site map. Using these methods, a plug-in application can be added which dynamically superimposes data onto the site map by, for example, selectively modifying display colors of nodes and links, selectively hiding nodes and links, and/or attaching alphanumeric annotations to the nodes and links. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Weinberg into Cole since these two reference are directed to the process for graphically or visually representing information objects (GUI). Weinberg represents WEB sites and node structures graphically and Cole represents visual (graphically) navigation of information objects. Cole's invention would represent

Application/Control Number: 09/833,418 Page 10

Art Unit: 2672

Applicant's claim invention by integrating a part from Weinberg that is "dynamically superimposes data onto the site map" into Cole's. The result would thereby aid the user.

14. Claim 14.

"The computer program product as described in claim 13 further comprising: means for receiving a request from a user to rearrange the layers; means for rearranging the layers in response to the request, the rearranging including: means for re-matching one or more objects to a different layer from the plurality of layers; means for applying the display attributes corresponding to the different layer to the one or more re-matched objects; and means for displaying the one or more re-matched objects". See rejection of claim 13.

15. Claim 15.

"The computer program product as described in claim 13 further comprising: means for reading the objects from a data store; and means for reading one or more object attributes corresponding to each object from the data store, wherein the matching further comprises: means for matching the object attributes corresponding to each object to one or more layer attributes corresponding to each layer", Cole in Fig. 1 illustrates disk and memory for storing data and also reading data object from storage environment. Weinberg in Fig. 21 illustrates an icon for storing data objects.

16. Claim 16.

"The computer program product as described in claim 13 further comprising: means for creating the objects; means for setting one or more object attributes corresponding to each object; and means for storing the object and the object attributes in a data store". Cole at col. 8, lines 62-67 teaches the limitations of claim 4. Also see Weinberg's fig. 9.

17. Claim 17.

Art Unit: 2672

"The computer program product as described in claim 16 further comprising: means for establishing one or more relationships format least one of the objects to one or more other objects". Cole at col. 1, lines 51-63, teaches the limitations of claim 5. Weinberg at col. 6, lines 38-54 teaches the limitations of claim 5.

Page 11

18. Claim 18.

"The computer program product as described in claim 13 wherein the display attributes are selected from the group consisting of: color hue, color value, color saturation, size, three dimensional image, two dimensional image, animation, shading, fill pattern, line pattern, line weight, opaqueness, transparency, proximity, shape, and object anomaly", according to Markush groups, Cole in Figs.3-9 illustrates the display attributes. Weinberg in Fig. 18 illustrates colorcoding.

19. Claim 19.

"The computer program product as described in claim 13 further comprising: means for displaying one or more relationship lines connecting at least one of the objects to one or more other objects", see rejection of claim 13.

20. Claim 20.

"The computer program product as described in claim 13 further comprising: means for determining a layer order for the plurality of layers, wherein the layer order determines a display emphasis corresponding to objects in the corresponding layers". Cole and Weinberg teach this limitation in fig. 2, and Figs. 1-6 respectively.

Art Unit: 2672

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-746-8705.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini Examiner Art Unit 2672

nach a

Page 12

Javid Amini

MATTHEW LUU PRIMARY EXAMINER